

AMENDMENTS TO THE SPECIFICATION

In the Sequence Listing:

Please insert a paper copy of the sequence listing as new pages 1-2 in the above-mentioned application. A computer readable form copy (CRF copy) of the sequence listing accompanies this response.

At page 1, please amend the paragraph at line 4 as follows:

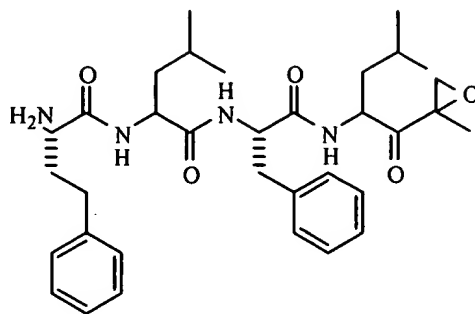
--This application is a continuation-in-part of U.S. Serial No. 09/421,545, filed 20 October 1999, now ~~pending~~ allowed, which is a continuation-in-part of U.S. Serial No. 09/361,775, filed 27 July 1999, now U.S. Patent No. 6,410,512, which is a continuation-in-part of U.S. Serial No. 09/113,947, filed 10 July 1998, now U.S. Patent No. 6,462,019. The contents of these applications are incorporated herein by reference.--

Please amend the specification to add the following paragraph at page 1, line 6 as follows:

Reference to a Sequence Listing

The sequence listing contained in the accompanying compact disc entitled "43272-20026.23 SEQ listing", created on May 5, 2004, 2,048 bytes, is incorporated by reference in its entirety.

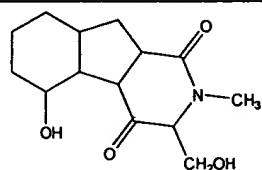
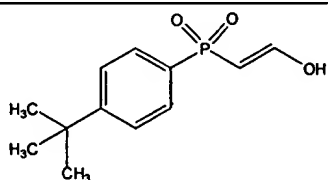
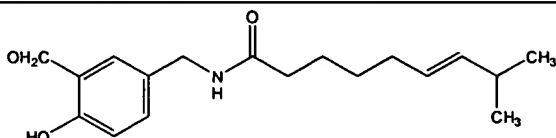
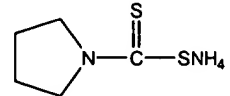
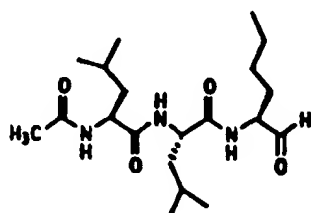
Please add the following new paragraph at page 28, line 4 as follows:



The compound can _____, epoxomicin, pyrazylcarbonyl-Phe-Leu-Boronate (PS-341), tri-leucine vinyl sulfone (NLVS), N-carbobenzoyl-Ile-Glu-(OtBu)-Ala-Leu-CHO (PSI) epoxide, lactacystin, or a peptidyl aldehyde.

Please replace the table on page 27 beginning at line 1, with the following amended table:

Compounds known to be proteasome or NF- κ B inhibitors include:

Proteasome Inhibitors	
PSI	N-carbobenzoyl-Ile-Glu-(OtBu)-Ala-Leu-CHO
MG-132	N-carbobenzoyl-Leu-Leu-Leu-CHO
MG-115	N-carbobenzoyl-Leu-Leu-Nva-CHO
MG-101 or Calpain Inh I	N-Acetyl-Leu-Leu-norLeu-CHO
ALLM	N-Acetyl-Leu-Leu-Met-CHO
	N-carbobenzoyl-Gly-Pro-Phe-Leu-CHO (SEQ ID NO:1)
	N-carbobenzoyl-Gly-Pro-Ala-Phe-CHO (SEQ ID NO:2)
	N-carbobenzoyl-Leu-Leu-Phe-CHO
	N-carbobenzoyl-Leu-Ala-Leu-CHO
Gliotoxin	
SN50	NLS of NF- κ B MW 2781
Bay 11-7082	
Capsaicin	
PDTC	
ALLN	 N-Acetyl-Leu-Leu-Nle-CHO

Please replace the paragraph beginning on page 39, line 4, with the following amended paragraph:

An assay to test the effect of compounds on the 20S thermophila proteasome activity was employed. Purified 20S thermophila proteasomes and the fluorogenic peptide substrate Suc-Leu-Leu-Val-Tyr-AMC (SEQ ID NO:3) are available from CalBiochem, San Diego, CA. Briefly, serial dilutions of the inhibitor to be tested were mixed with proteasome solution at a concentration of proteasome of 0.01 mg/ml. After 30 min incubation at 37°C, substrate solution at a final concentration of 25-30 µg/ml was added and the mixture incubated at 37°C and then read at 15 min, 30 min, and 60 min in a Fluoroscan instrument. The percentage diminution in fluorescence in the presence as compared to the absence of inhibitor is then calculated.